Detailed Comments
Norwood Project Area Draft EIS
Black Hills National Forest
Hells Canyon Ranger District

Watershed, Geology and Soils

The DEIS includes a thorough description of the watersheds, precipitation and climate, and geology of the Norwood Project Area (NPA). Slope and soil types/erosivity are quantified and mapped, and Connected Disturbed Areas (CDA) are identified and described. The DEIS also provides good information on other areas that were identified as causing impacts to the watershed, which are not considered CDAs because they are not near streams. One of those areas is impacted by an unauthorized road that "needs to be closed and rehabilitated," (page 32) and nine others are related to cattle grazing. Please indicate in the FEIS how this project will impact these CDAs and the 10 non-CDAs.

The DEIS states there are no streams or waterbodies within the project area that are listed in the South Dakota 303(d) Waterbody List. Thompson Creek is the only stream on the Forest that is considered "at-risk," because of cattle trampling. The document states that the road adjacent to the stream does not appear to be affecting the stream (page 36). There are 4.3 miles of road within the Watershed Influence Zone (WIZ, page 40) where sediment may be a concern. Please clarify in the FEIS whether the road next to Thompson Creek is considered within the WIZ. If so, please characterize whether it is contributing to a transfer of sediment to the creek, and /or whether it is being considered for obliteration.

EPA notes that the project would involve construction of 2.7 miles of new road, and convert 16.5 miles of currently undetermined roads into the existing system (page 197-198).We recognize that total road density would decline from 4.0 miles of road per square mile to 3.2 miles, due to removal of undetermined roads. However, the DEIS contains no information on how those converted roads would be maintained or improved from their current condition. As described in the document, the roads "have poor alignment or are located in drainage bottoms, that experience poor soil stabilization or have inadequate cross drainage … and would likely to degrade over time" (page198). EPA is concerned about the impact of adopting roads that, as described in the No Action alternative, would "likely contribute to increased sediment delivery into adjacent drainages, surface destabilization and rutting, and potential catastrophic road failure due to slides and loss of embankment material" (page 198). Please include information in the FEIS on how water and soil resources will be protected under this revised transportation network.

For the 2.7 miles of new road construction under the proposed alternative, EPA's general recommendations include:

- Minimize road construction and road density to reduce adverse impacts to watersheds
- Locate roads away from streams and riparian areas as much as possible
- Locate roads away from steep slopes or erosive soils
- Minimize road stream crossings
- Stabilize cut and fill slopes
- Provide adequate road drainage and control surface erosion with adequate waterbars, crowns, rolling dips and ditch relief culverts to promote drainage off roads or along roads
- Consider road effects on stream structure and seasonal and spawning habitats when determining alignment
- Allow for adequate large woody debris recruitment to streams and riparian buffers near streams

Wetlands

There are 35 acres of wetland polygons and 47 miles of mapped linear wetlands within the project area, as shown on Map 13, The DEIS states there has been no determination of whether the wetlands are jurisdictional (page 36). The DEIS appears to have no other information on protection, improvement and/or restoration of wetlands and riparian areas. Executive Order 11990 requires all federal land managers to protect wetlands regardless of whether or not they are jurisdictional. Wetlands impacts should be first avoided, and then minimized to the maximum extent possible. Any unavoidable impacts should be compensated through wetland restoration, creation or enhancement. The national wetlands policy has set an interim goal of No Overall Net Loss of the Nation's remaining wetlands, and a long-term goal of increasing the quantity and quality of our wetlands resources. EPA supports the use of no-harvest buffers to wetlands, and the use of BMPs that restrict heavy equipment operation in wetlands. We also support the identification of wetlands through field visits to each treatment area, so that wetlands are clearly marked on the Sale Area Map. This will ensure that timber contractors can easily avoid impacting those aquatic resources.

Noxious weeds

The DEIS states that there are at least 750 acres of noxious weed infestations, and that infestations can be expected to spread at least 30 percent per year when there is a disturbance (page 173). Under the preferred alternative 2, 14,231 acres have the potential for being disturbed as trees are dropped and skidded to landing decks and understory fuels are treated. While Appendix C - Norwood Project Monitoring indicates that noxious weed treatments will be monitored, the DEIS does not address how the project will implement the BHNF Noxious Weed Management Plan. Please include a commitment to this plan in the FEIS. The Forest may also want to consider prevention measures including:

- vigilantly monitor and eradicate new infestations
- use certified weed-free seeds

- prevent vehicles from moving freely between infested and non-infested areas
- thoroughly clean the undercarriage of any vehicles or machinery coming into a treatment area
- permit animals to graze weeds only before they flower and set seed
- minimize soil disturbance caused by water, livestock, vehicles or machinery
- create, maintain and monitor boundary strips between infested and non-infested areas
- use good land management practices such as rotational grazing, water conservation, erosion control, revegetation and maintenance of competitive vegetation that can withstand weed invasion.

Wildlife habitat

EPA supports Forest Service consultation with the U.S. Fish and Wildlife Service, the South Dakota Game, Fish and Parks Department and the Wyoming Department of Environmental Quality to reduce and mitigate adverse fish and wildlife impacts. Appendix B provides some information on design criteria for different wildlife species and their habitats, and other project activities. Appendix C identifies additional monitoring objectives/items for particular resource monitoring needs including hydrology and soils, sensitive plants, noxious weeds and fuels. These documents provide good summaries of the standards and objectives the Forest intends to meet, consistent with Forest Plan direction, and monitoring protocols that have been established for various resources. However, EPA is concerned that there are no identified targets or thresholds which would signify when management actions would be modified to ensure wildlife and other resources are adequately protected.

We encourage the Forest to consider using an adaptive management approach for the bald eagle and the 11 sensitive wildlife species with potential habitat in the project area. An effective adaptive management approach would include a strong commitment to monitoring to ensure that the project is meeting objectives and mitigating impacts to habitat. It would also include:

- a decision tree with clear objectives to guide future decisions
- targets/thresholds that specify a desired future condition
- trends specifying a desired change relative to the current condition, especially when trend is more important than condition, or information is lacking to describe future condition
- specific decision thresholds with identified indicators for each impacted resource
- a monitoring plan with protocols to assess whether thresholds are being met
- a firm commitment to use monitoring results to modify management actions as necessary.